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VVV VVV VVV VVV MMMM SSSSSSSSSSS LLLL I I I I I I I BBBBBBBBBBBB

\*\*FILE\*\*ID\*\*SYITABLE

J 13

SSSSSSSS YY YY IIIIIII TTTTTTTT AAAA ABBBBBBB LL EEEEEEEE  
SSSSSSSS YY YY IIIIIII TTTTTTTT AAAA ABBBBBBB LL EEEEEEEE  
SS YY YY II TT AA AA BB BB LL EE  
SS YY YY II TT AA AA BB BB LL EE  
SS YY YY II TT AA AA BB BB LL EE  
SS YY YY II TT AA AA BB BB LL EE  
SSSSSS YY YY II TT AA AA BBBB BBBB LL EEEEEE  
SSSSSS YY YY II TT AA AA BBBB BBBB LL EEEEEE  
SS YY YY II TT AAAAAAAA BB BB LL EE  
SS YY YY II TT AAAAAAAA BB BB LL EE  
SS YY YY II TT AA AA BB BB LL EE  
SS YY YY II TT AA AA BB BB LL EE  
SSSSSS YY YY IIIIIII TTT AAAA ABBBBBBB LLLLLLLL EEEEEEEE  
SSSSSS YY YY IIIIIII TTT AAAA ABBBBBBB LLLLLLLL EEEEEEEE

.IDENT 'V04-000'

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ENVIRONMENT: prefix file

AUTHOR: Ken Henderson CREATION DATE: 15 Feb 1983

MODIFIED BY:

V03-011	CWH3011	CW Hoobs	24-Jul-1984
		Add WS_OPAO bit, workstation using QVSS console.	
V03-010	WMC0003	Wayne Cardoza	2-Feb-1984
		Need at least one bit set in PAGEFILE_PAGE	
V03-009	WMC0002	Wayne Cardoza	31-Jan-1984
		Add emulated instruction flags.	
V03-008	WMC0001	Wayne Cardoza	01-JAN-1984
		Add page and swap file data.	
V03-007	KFH0006	Ken Henderson	18 Aug 1983
		Change SCS_EXISTS to boolean	
		Changed SID back to DECNUM	
V03-006	KFH0005	Ken Henderson	28 Jul 1983
		Add SCSS\$GA_EXISTS, delete SERIAL, MFGPLANT,	
		HWREVISION, ALLOCCLASS and the login security params	
V03-005	GAS0142	Gerry Smith	23-Jun-1983
		Add ALLOCCLASS, and the login security parameters	

V03-004 KFH0004 Ken Henderson 16 Jun 1983  
Changed SID to HEXNUM, NODE\_AREA and  
NODE\_NUMBER to 4 bytes long.

V03-003 KFH0003 Ken Henderson 21 May 1983  
Added cluster item-codes.

V03-002 KFH0002 Ken Henderson 8 Mar 1983  
Added BOOTTIME item-code.

V03-001 KFH0001 Ken Henderson 22 Feb 1983  
Added SERIAL, MFGPLANT, and HWREVISION  
item-codes.

.MACRO SYI\_ITEMTABLES

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ABSTRACT:

SYI\_ITEMTABLES macro

This macro expands to generate multiple calls to the SYI\_ITEM\_CODE macro, which must be previously locally defined in the module which invokes SYI\_GENERATE\_TABLE. The SYI\_GENERATE\_TABLE macro calls SYI\_ITEMTABLES once - to define the GETSYI item-codes that are Not SYSBOOT parameters.

The parameters that are passed to the SYI\_ITEM\_CODE macro follow:

BASE determines which EXE\$GETSYI table to use. It's tables correspond roughly to the source of the data. The legal parameter values here are: EXE, FLD

NAME is the name of the SYSS\$GETSYI item-code. The legal parameter values here are determined by the \$SYIDEF macro (in [VMSLIB.SRC]STARDEFQZ.SDL).

SOURCE is either an address of a cell, or a processor register number (as determined by the BASE parameter).

DTYPE is both a datatype and a usage indicator. The legal values and examples for this parameter follow:

STDTIM	(CTL\$GQ_LOGIN)	64 bit time
STDUIC	(PCBSL_DIC)	user ID code
HEXNUM	(CTL\$AQ_EXCVEC)	hex number
HEXSTR	(CLUB\$B\$FSYSID)	hex string
DECNUM	(PCBSL_BYTLM)	decimal number
PRVMSK	(PHDSQ_PRIVMSK)	privilege mask
STRDSC	(CTL\$GE_IMGHDRBF)	string descr
CNTSTR	(PCBST_TERMINAL)	counted string
PADSTR	(JIB\$T_ACCOUNT)	blank padded str
BITVEC	(PCBSL_STS)	bit vector
BITVAL	(JIB\$V_TERMDIAL)	boolean quantity

BITPOS is the bit position for FLD data items.

BITSIZE is the bit size of FLD data items.

OUTLEN is used by EXE\$GETSYI in fetching information (number of bytes).

;BASE, NAME, SOURCE, DTYPe, BITPOS, BITSIZ, OUTLEN

; 64-bit abs. system at system boot

SYI\_ITEM\_CODE -  
EXE, BOOTTIME, EXESGQ\_BOOTTIME, STDTIM, 0, 0, 8

; software version number

SYI\_ITEM\_CODE -  
EXE, VERSION, SYSSGQ\_VERSION, PADSTR, 0, 0, 8

; system ID register

SYI\_ITEM\_CODE -  
EXE, SID, PRS\_SID, DECNUM, 0, 0, 4

; total nodes in cluster

SYI\_ITEM\_CODE -  
EXE, CLUSTER\_NODES, CLUB\$W\_NODES, DECNUM, 0, 0, 2

; total votes in cluster

SYI\_ITEM\_CODE -  
EXE, CLUSTER\_VOTES, CLUB\$W\_VOTES, DECNUM, 0, 0, 2

; total quorum in cluster

SYI\_ITEM\_CODE -  
EXE, CLUSTER\_QUORUM, CLUB\$W\_QUORUM, DECNUM, 0, 0, 2

; founding system id

SYI\_ITEM\_CODE -  
EXE, CLUSTER\_FSYSID, CLUB\$B\_FSYSID, HEXNUM, 0, 0, 6

; founding boottime

SYI\_ITEM\_CODE -  
EXE, CLUSTER\_FTIME, CLUB\$Q\_FTIME, STDTIM, 0, 0, 8

; cluster membership status

SYI\_ITEM\_CODE -  
EXE, CLUSTER\_MEMBER, CLUSGL\_CLUB, BITVAL, 0, 0, 1

;BASE, NAME, SOURCE, DTYPe, BITPOS, BITSIZ, OUTLEN

; CSID of target

SYI\_ITEM\_CODE -  
EXE, NODE\_CSID, CSBSL\_CSID, HEXNUM, 0, 0, 4

; votes of target

SYI\_ITEM\_CODE -  
EXE, NODE\_VOTES, CSB\$W\_VOTES, DECNUM, 0, 0, 2

; quorum of target

SYI\_ITEM\_CODE -  
EXE, NODE\_QUORUM, CSB\$W\_QUORUM, DECNUM, 0, 0, 2

; system id of target  
SYI\_ITEM\_CODE -  
EXE, NODE\_SYSTEMID, SB\$B\_SYSTEMID, HEXSTR, 0, 0, 6

; decnet area of target  
SYI\_ITEM\_CODE -  
FLD, NODE\_AREA, SB\$B\_SYSTEMID, DECNUM, 10, 6, 4

; decnet number of target  
SYI\_ITEM\_CODE -  
FLD, NODE\_NUMBER, SB\$B\_SYSTEMID, DECNUM, 0, 10, 4

; S/W incarnation of target  
SYI\_ITEM\_CODE -  
EXE, NODE\_SWINCARN, SB\$Q\_SWINCARN, HEXSTR, 0, 0, 8

; S/W type of target  
SYI\_ITEM\_CODE -  
EXE, NODE\_SWTYPE, SB\$T\_SWTYPE, PADSTR, 0, 0, 4

; S/W version of target  
SYI\_ITEM\_CODE -  
EXE, NODE\_SWVERS, SB\$T\_SWVERS, PADSTR, 0, 0, 4

; H/W type of target  
SYI\_ITEM\_CODE -  
EXE, NODE\_HWTYPE, SB\$T\_HWTYPE, PADSTR, 0, 0, 4

; H/W version of target  
SYI\_ITEM\_CODE -  
EXE, NODE\_HWVERS, SB\$B\_HWVERS, HEXSTR, 0, 0, 12

; Nodename of target  
SYI\_ITEM\_CODE -  
EXE, NODENAME, SB\$T\_NODENAME, CNTSTR, 0, 0, 16

; Architecture Flags  
SYI\_ITEM\_CODE -  
EXE, ARCHFLAG, EXE\$GL\_ARCHFLAG, BITVEC, 0, 0, 4  
SYI\_ITEM\_CODE -  
FLD, CHARACTER\_EMULATED, EXE\$GL\_ARCHFLAG, BITVAL, ARCSV\_CHAR\_EMUL, 1, 1  
SYI\_ITEM\_CODE -  
FLD, DECIMAL\_EMULATED, EXE\$GL\_ARCHFLAG, BITVAL, ARCSV\_DCML\_EMUL, 1, 1  
SYI\_ITEM\_CODE -  
FLD, D\_FLOAT\_EMULATED, EXE\$GL\_ARCHFLAG, BITVAL, ARCSV\_DFLT\_EMUL, 1, 1  
SYI\_ITEM\_CODE -  
FLD, F\_FLOAT\_EMULATED, EXE\$GL\_ARCHFLAG, BITVAL, ARCSV\_FFLT\_EMUL, 1, 1  
SYI\_ITEM\_CODE -  
FLD, G\_FLOAT\_EMULATED, EXE\$GL\_ARCHFLAG, BITVAL, ARCSV\_GFLT\_EMUL, 1, 1  
SYI\_ITEM\_CODE -  
FLD, H\_FLOAT\_EMULATED, EXE\$GL\_ARCHFLAG, BITVAL, ARCSV\_HFLT\_EMUL, 1, 1

; Workstation flags  
SYI\_ITEM\_CODE -  
FLD, WS\_OPAO, EXE\$GL\_WSFLAGS, BITVAL, EXE\$V\_OPAO, 1, 1

:BASE, NAME, SOURCE, DTYPE, BITPOS, BITSIZ, OUTLEN  
:  
: CPU type  
SYI\_ITEM\_CODE -  
FLD, CPU, PR\$\_SID, DECNUM PR\$V\_SID\_TYPE, PR\$S\_SID\_TYPE, 4  
: Flag to show whether SCS is loaded  
SYI\_ITEM\_CODE -  
EXE, SCS\_EXISTS, SCSSGA\_EXISTS, BITVAL, 0, 0, 1  
: Total size of page files  
SYI\_ITEM\_CODE -  
EXE, PAGEFILE\_PAGE, 4+0, DECNUM, 0, 0, 4  
: Total size of swap files  
SYI\_ITEM\_CODE -  
EXE, SWAPFILE\_PAGE, 4+1, DECNUM, 0, 0, 4  
: Free pagefile pages  
SYI\_ITEM\_CODE -  
EXE, PAGEFILE\_FREE, 4+2, DECNUM, 0, 0, 4  
: Free swapfile pages  
SYI\_ITEM\_CODE -  
EXE, SWAPFILE\_FREE, 4+3, DECNUM, 0, 0, 4  
.ENDM SYI\_ITEMTABLES

0434 AH-BT13A-SE  
VAX/VMS V4.0

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